REMARKS/ARGUMENTS

The final Office Action of October 20, 2005, the Advisory Action of February 7, 2006, and the Advisory Action of March 6, 2006, have been carefully reviewed and these remarks and amendment address the concerns stated in the Office Action. All objections and rejections are respectfully traversed.

I.   PETITION FOR AN ADDITIONAL ONE-MONTH EXTENSION OF TIME

A Petition for a one-month extension of time has been previously filed. A Petition for an additional one-month extension of time under 37 C.F.R. §1.136(a), and the appropriate extension fee for a large entity, are attached hereto. The Office Action was mailed on October 20, 2005, thus making this response timely filed, with the additional one-month extension of time, on or before March 20, 2006.

II.   REQUEST FOR CONTINUED EXAMINATION UNDER 37 C.F.R. § 1.114

Applicant herein files a Request for Continued Examination under 37 C.F.R. § 1 114.

III.   STATUS OF THE CLAIMS

Claims 1-4, 6-16, and 18-33 are still pending in the application.

Claims 5, 17, and 34-36 have been cancelled without prejudice.

Group I, claims 1-4, 6-16, and 18-33 have been constructively elected.

Claims 1, 2, 4, 6, 9, 10, 13-16, 19, 23, 24, 26-30, and 33 have been amended. Most amendments have been made to correct informalities. Support for any substantive amendments is discussed in the following text. No new matter has been added, and the claims presently remaining in the application are now believed to be in condition for allowance.

Claims 1-4, 7-16, 18, 19, and 21-33 are rejected under 35 U.S.C. § 103(a) as being unpatentable over Liang, U.S. Patent No. 6,738,811, filed on March 31, 2000, issued May 18, 2004 (Liang), in view of Sampath et al., U.S. Patent No. 6,892,317, filed on December 16, 1999, issued May 10, 2005 (Sampath).

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Applicant respectfully points out that Liang issued May 18, 2004, 3 ½ years after the filing of the present application (December 11, 2000). Applicant therefore reserves the right under 37 C.F.R. § 1.131 to swear behind Liang.

Applicant respectfully points out that Sampath issued May 10, 2005, 4 ½ years after the filing of the present application. Applicant therefore reserves the right under 37 C.F.R. § 1.131 to swear behind Sampath.

Claims 6 and 20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Liang in view of Sampath, and further in view of Johnson, U.S. Patent Application Number 2003/0237016, filed March 1, 2001, published December 25, 2003 (Johnson). Applicant respectfully points out that Johnson claims priority to United States Provisional Application # 60/187,211 (US '211) filed on March 3, 2000. However, Applicant asserts that US '211 does not support the passages cited in Johnson to reject claims 6 and 20. Because the filing date of Johnson falls after Applicant's filing date, Johnson fails as a reference. Thus, since there are no valid rejections for claims 6 and 20, claims 6 and 20 are allowable.

IV.   CLAIM REJECTIONS UNDER 35 U.S.C. § 103(a)

On pages 3-7 of the Office Action, the Office Action has rejected claims 1-4, 6-16, and 18-33 under 35 U.S.C. § 103(a) as being unpatentable over Liang in view of Sampath. On page 8, the Office Action has rejected claims 6 and 20 under 35 U.S.C. § 103 as being unpatentable over Liang in view of Sampath, and further in view of Johnson.

All of independent claims together with most of the dependent claims have been amended to not only clarify the inventive concepts of the present invention, but also to place the claims in conditions for allowance. For example, Applicant has amended the independent claims to clearly point out the following:

(1) In claims 1, 9, 15, 2, and 29, Applicant's claimed "historical data" has been further defined as "historical *utilization* data" to clarify that Applicant is collecting utilization data, not repair-related data.

(2) In claims 1 and 9, Applicant has explicitly claimed the step of *establishing a statistical analysis technique specific to each monitored hardware resource* to clarify (1) that

the analysis performed on historical utilization data is statistical in nature, and (2) that each monitored hardware resource is associated with a statistical analysis technique specific to that monitored hardware resource.

(3) In claims 1, 9, 15, 23, and 29, Applicant's claimed "updating/modifying the analysis technique" has been clarified as follows *executing a new statistical analysis technique based on a second signal* to indicate that as a second signal is received, an entirely new analysis technique is automatically executed.

As a result, Applicant contends that all the claims presently in this application are in condition for allowance. To even further support Applicant's contention that claims are in condition for allowance, the Examiner is referred to supporting remarks presented below.

In order for a rejection under 35 U.S.C. §103 to be sustained, the Office Action must establish a prima facie case of obviousness. To establish a *prima facie* case of obviousness, three basic criteria must be met. First, there must be some suggestion or motivation, either in the reference itself or in the knowledge generally available to one of ordinary skill in the art, to modify the reference. Second, there must be a reasonable expectation of success. Finally, the prior art reference must teach or suggest all the claim limitations. The teaching or suggestion to make the claimed combination and the reasonable expectation of success must both be found in the prior art, not in Applicant's disclosure. *In re Vaeck*, 947 F.2d 488, 20 USPQ2d 1438 (Fed. Cir. 1991). Applicant respectfully asserts that claims 1-4, 6-16, and 18-33 are patentable over the combination of Liang, Sampath, and Johnson because (note that Italics indicate the claim amendment and the important difference between the cited prior art and Applicant's claimed invention):

(1) None of Liang, Sampath, nor Johnson alone nor their combination teaches or suggests Applicant's claimed method, system, and computer product including the step or element of obtaining historical *utilization* data (amended independent claims 1, 9, 15, 23, and 29).

(2) None of Liang, Sampath, nor Johnson alone nor their combination teaches or suggests Applicant's claimed establishing a statistical analysis technique *specific to each monitored hardware resource* (amended independent claims 1, 9, 15, 23, and 29).

(3) None of Liang, Sampath, nor Johnson alone nor their combination teaches or suggests Applicant's claimed *automatically executing a new statistical analysis technique* (amended independent claims 1, 9, 15, 23, and 29).

(4) Neither Sampath nor Johnson is properly combinable with Liang for the purposes of 35 U.S.C. § 103 because either combination would prevent Liang from operating as intended.

(5) Claims 6 and 20 are rejected based on citations in Johnson which are not supported by US '211. The capabilities of the content router of Johnson stated in the cited passages -- specifically a system management graphical user interface to modify the content of the router remotely, and the ability of the content router to monitor the health of key hardware and software resources using counters and statistics that are made available to the user – are not disclosed in the priority document of Johnson, US '211. Thus, Johnson fails as a reference because Johnson was filed on March 1, 2001, which is after Applicant's filing date of December 11, 2000.

The patentability of claims 1-4, 6-16, and 18-33 is further supported by the following remarks/arguments.

On pages 3-7 of the Office Action, in paragraphs 7-9, 15, 20, 22, and 23 with respect to independent claims 1, 9, 15, 23, and 29,

(1) The Office Action states that Liang discloses the invention substantially as claimed including the method of automatically allocating additional hardware resources to a computer having a plurality of hardware resources, said method comprising monitoring use of selected ones of the hardware resources by the computer to obtain historical data pertaining to the historical availability to the computer of each of the monitored hardware resources (the Office Action states that Liang discloses monitoring computer components and keep history for each of the parameters being monitored) (Liang, Abstract; col. 2, lines 21-32, col. 9, lines 28-38).

Applicant has amended claim 1 to further clarify that the data obtained from monitoring the hardware resources is *utilization* data (namely, data such as memory disk space, network bandwidth utilization, etc.) (Applicant's Specification, page 6, lines 14-16).

In the first cited passage (Liang, Abstract), Liang states that a module periodically samples values representing the health condition of a computing device, that the sampled values are sent to a monitoring server for analysis, that the monitoring server determines if the computing device is in a good/poor condition based on sampled values, that the sampled values are used to predicate the remaining time before the computing device breaks down.

In the second cited passage (Liang, col. 2, lines 21-32), Liang states that the monitoring server maintains a database that includes information regarding each of the registered computing devices, that at least one of the data areas is used to keep history for each of the parameters being monitored, that the historic data are used to predicate the remaining time before the computing device breaks down.

In the third cited passage (Liang, col. 9, lines 28-38), Liang states a method that determines if the computing device is in a normal condition by comparing a measured value with a set of criteria designated for the component, wherein the criteria are based on historic data. In other words, Liang monitors device physical characteristics such as temperature, compares their values with a measured set of criteria, and determines if a computing device is going to break down based on the comparison of physical characteristics with the measured set of criteria. Liang monitors device thermostats, fan speeds, and voltages (col. 2, lines 39-41) and compares their values to the normal ranges for those parameters.

In rebuttal to the above, Applicant, in contrast to Liang, claims, in amended claims 1, 9, 15, 23, and 29, obtaining historical utilization data. This type of data includes information such as memory disk space, network bandwidth utilization, number of active processes, and number of users (Applicant's specification, page 6, lines 14-16), data that could indicate how much of a resource is available, for example, how much disk space is left. In Liang, the purpose of collecting temperature data is to determine if the device reaches a temperature at which repairs are necessary (depicted in Liang's FIG. 4C), whereas in Applicant's system, the purpose of collecting disk space statistics is to determine if it is necessary to add more disks (Applicant's claimed automatically adding a new hardware resource). Liang does not make obvious Applicant's amended independent claims 1, 9, 15, 23, and 29 because Liang's physical characteristic data is different from Applicant's claimed historical utilization data, and thus the rejection of amended independent claims 1, 9, 15, 23, and 29 under 35 U.S.C. §103 should be withdrawn.

(2) The Office Action states that, with respect to independent claims 1, 9, 15, 23, and 29, as well as dependent claims 8 and 22 (OA, pages 6 and 7), Liang discloses the step of automatically analyzing, according to an analysis technique specific to each selected one of the hardware resource (the Office Action states that Liang discloses a plurality of parameters for each component being monitored) (Liang, 304 FIG. 3, col. 6, lines 15-30), the obtained historical data to arrive at a prediction of a further level of availability of a monitored hardware resource (the Office Action states that Liang discloses the step of analyzing the historic data to find out the trend from which a remaining time to a breakdown may be estimated), the monitored hardware resources are selected from the set of resources, including memory, CPU, disk, available ports, and network resources (Liang, col. 2, lines 38-49, col. 8, lines 35-39).

In the cited figure (Liang, 304, FIG. 3), Liang depicts a table of parameters such as power and temperature associated with a registered server ID, device info, and other info.

In the first cited passage (Liang, col. 6, lines 15-30), Liang states that a list of registered servers is maintained, that parameters or components to be monitored in a registered server are maintained in a table.

In the second cited passage (Liang, col. 2, lines 38-49), Liang states that the system can automatically detect or predict a failure of a registered server, that the prediction is performed by software and/or hardware units built into the system, that critical parts of a registered server are monitored -- for example, CPU thermostat, motherboard thermostat, chassis thermostat, cooling fan speed and voltages of many critical points of the registered server – that a monitoring server is configured with an expert system based on historic data collected over the time to predict when the registered server may experience a breakdown due to the failure of one of the parameters being monitored.

In the third cited passage (Liang, col. 8, lines 35-39), Liang states that the remaining time to breakdown is determined by analyzing historic data to find out the trend. In other words, Liang states that information such as power, temperature, and fan speed about a registered server are collected and maintained by a monitoring server, that the monitoring server detects and predicts the failure of a registered server. Each example provided by Liang indicates that physical characteristic data are compared against a threshold.

In rebuttal to the above, Applicant has amended independent claims 1, 9, and 23 to explicitly state the step and element of *establishing a statistical analysis technique specific to each monitored hardware resource* where necessary. Support for these amendments can be found in the claims themselves and in Applicant's Specification, page 9, lines 15-17. Liang cannot make obvious Applicant's claimed analysis technique specific to each of the plurality of hardware resources because Liang performs a comparison of physical characteristic data against a threshold for all the devices in the same way, and Liang does not disclose or suggest the flexibility of Applicant's claimed analysis technique specific to each monitored hardware resource. Since Liang does not disclose or suggest Applicant's claimed analysis technique specific to each monitored hardware resource, Liang cannot make obvious Applicant's claims 1, 9, 15, 23, and 29, nor claims 8 and 22, and therefore the rejection of those claims under 35 U.S.C. § 103 should be withdrawn.

(3) The Office Action states that, with respect to claims 1, 9, 15, 23, and 29, Liang discloses a method of automatically allocating additional hardware resources to a computer having a plurality of hardware resources comprising the step of automatically updating the analysis technique based on the signal (the Office Action states that Liang discloses automatically consolidated data) (Liang, FIG. 4B, col. 7, lines 20-36, col. 8, line 45-48).

In Liang's FIG. 4B, Liang depicts historic temperature averages for each day based on data sampled on a predefined time interval and combined to represent a measurement period.

In the first cited passage (Liang, col. 7, lines 20-36), Liang states that, at the end of a day, data are automatically consolidated into a single representation, for example, temperature and surrounding temperature, that a series of historic data is collected, and that a possible breakdown of a component or a part in a server or the server itself is predicated based on the historic data.

In the second cited passage (Liang, col. 8, line 45-48), Liang states that if the remaining time is not critical, e.g. a few months, the sampled values are archived to update the historic data. In other words, Liang tracks physical conditions, such as the temperature of the registered server, and uses them to determine if a breakdown is imminent, or archives them as updates to historic data. Liang states data analysis to include averaging a parameter

over time, determining a trend, and notifying the owner of the registered server if the trend indicates that the registered server will fail. Liang's only analysis is therefore occurring when the data used to determine a trend and when the data are compared to the breakdown threshold. Storing data when the breakdown isn't imminent in Liang's system is not an analysis technique.

In rebuttal to the above, Applicant has amended claims 1, 9, 15, 23, and 29 to explicitly state that a new analysis technique is automatically executed. Support for this amendment can be found in the meaning of the claims themselves, and in Applicant's Specification, page 9, lines 15-17. Thus, because the analysis technique of Liang does not vary (and therefore is not updated, or a new analysis technique is not executed), Liang does not disclose or suggest Applicant's claimed automatically updating the analysis technique (previously presented) or automatically executing a new analysis technique (currently amended), and Liang cannot make obvious Applicant's claims 1, 9, 15, 23, and 29. The 35 U.S.C. § 103 rejection of claims 1, 9, 15, 23, and 29 should be withdrawn.

(4) The Office Action states that, with respect to claims 1, 9, 15, 23, and 29, Liang discloses a method for automatically allocating additional hardware resources comprising the step of, without user intervention, responding to the signal by automatically reserving or ordering an additional physical hardware resource that is not in the computer when the signal is provided (the Office Action states that Liang discloses ordering of replacement part) (Liang, col. 5, lines 31-39, col. 7, lines 52-65, col. 8, lines 41-45).

In the first cited passage (Liang, col. 5, lines 31-39), Liang states that, based on a set of criteria for each of the register servers, a monitoring server determines a status condition for each registered server, and that if the server is "critical" (about to fail), measures such as notifying the owner, providing solutions, arranging replacement, or scheduling repairs happen automatically.

In the second cited passage (Liang, col. 7, lines 52-65), Liang states that the owner of a registered server is notified of the remaining time to failure through, for example, e-mail, that the e-mail can include a list of service providers who could provide solutions for the failure, or that the e-mail can include a confirmation that the parts have been ordered or where and when the parts will arrive.

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In the third cited passage (Liang, col. 8, lines 41-45), Liang states that the service needs may include an order of a replacement, and that adjusted parameters can be sent to a registered server to cause, for example, an application to readjust its status or clean up the memory or residual values in memory. In other words, Liang actions, such as ordering parts and adjusting parameters, are taken when a failure is about to occur. Liang's replacement part, by definition, is replacing a part that is in the computer when it fails.

In rebuttal to the above, Applicant, on the contrary, claims an additional hardware resource that is not in the computer when the signal is provided. Applicant is pulling in additional resources when there is a need. Nowhere does Liang disclose or suggest Applicant's claimed ordering additional hardware resources because Liang's ordering of replacement parts is simply swapping an existing failed part for a working part. Because Liang does not disclose or suggest Applicant's claimed reserving or ordering an *additional* hardware resource, Liang cannot make obvious Applicant's claims 1, 9, 15, 23, and 29, and the rejection under 35 U.S.C. 103 should be withdrawn.

(5) The Office Action states that, with respect to claims 1, 9, 15, 23, and 29, Liang does not disclose an additional physical hardware resources that is to be later manually physically added to the computer after the reserving or placing of an order, that Sampath discloses an additional physical hardware resource that is to be later manually physically added to the computer after the reserving or placing of an order (the Office Action states that Sampath discloses service require specialized technician) (Sampath, col. 7, lines 54-60, col. 8, lines 48-60).

In the first cited passage (Sampath, col. 7, lines 54-60), Sampath states that a service coordination circuit, having received an action request, could automatically schedule a service date, dispatch a service technician, and/or inform a third party service provider that routine maintenance is needed.

In the second cited passage (Sampath, col. 8, lines 48-60), Sampath states that an action request can be routed to an OEM service provider in order to schedule a highly specialized technician or warranty repair, that the action request is received via a network, link, and I/O interface at the service coordination, and that the service coordination schedules

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a service date. In other words, Sampath states that, when there is an electronic device failure, the diagnostic server sends an action request for repair.

In rebuttal to the above, neither Sampath nor Liang discloses or suggests Applicant's claimed step of automatically reserving or ordering an additional physical hardware resource that is to be later manually physically added to the computer after the reserving or placing of an order, because both address the problem of failed hardware resources that require replacement/repair, and because there is no mention of manually physically adding the additional hardware resource in either Liang or Sampath. Sampath simply states that a service technician could be dispatched. From the context of Sampath, the service technician would be replacing/repairing existing parts, whereas Applicant clearly claims that *additional* hardware resources are manually physically added to the computer. Thus, neither Liang nor Sampath nor their combination can make obvious Applicant's claims 1, 9, 15, 23, and 29, and the rejection under 35 U.S.C. 103 should be withdrawn.

Applicant respectfully asserts that claims 2, 3, 10, 16, 24, and 30 are patentable at least by virtue of their dependence upon allowable independent claims 1, 9, 15, 23, and 29.

On pages 5 and 7 of the Office Action, in paragraphs 12 and 21 with respect to dependent claims 4 and 18,

(1) The Office Action states that Liang does not disclose without user intervention, enabling the reduction of the monitored hardware resources when the prediction indicates that the monitored hardware resources will not be required.

(2) The Office Action states that Sampath discloses without user intervention, enabling the reduction of the monitored hardware resources when the prediction indicates that the monitored hardware resources will not be required (Sampath, col. 3, lines 50-61).

In the cited passage (Sampath, col. 3, lines 50-61), Sampath states that, since the electronic devices, diagnostic server, and parts and service providers are all interconnected, the system can pool diagnostic data received from the electronic systems for providing better failure prediction analysis, and that there is a reduction in service time and down time due to better failure prediction. In other words, Sampath states that reducing down time is accomplished by pooling data to provide better prediction of failure.

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In rebuttal to the above, Applicant has amended claim 4 to clarify that monitored hardware resources can be deallocated when they are not needed. Support for this amendment can be found in a possible meaning of the word "reduction" in the previously presented claim. Sampath does not disclose or suggest such a feature because there is no reduction or deallocation of hardware in Sampath. Since neither Liang nor Sampath disclose or suggest deallocating hardware resources when they are no longer needed, neither Liang nor Sampath can make obvious Applicant's claims 4 and 18, and the rejection of those claims under 35 U.S.C. § 103 should be withdrawn.

In further rebuttal, Sampath does not require its electronic devices to be installed with a piece of hardware or software to perform the device monitoring. Therefore, the electronic devices of Sampath would not provide Liang with the information expected by the monitoring server of Liang, and their failure could not be detected or predicted. Because the combination of Liang and Sampath would prevent Liang from operating as intended, Sampath and Liang are not combinable for the purposes of 35 U.S.C. § 103.

On pages 6-7 of the Office Action, in paragraphs 13, 19, 21, and 22 with respect to dependent claims 7, 14, 21, and 28, the Office Action states that Liang discloses analyzing available applications with respect to the utilization by the available applications of the monitored hardware resources (the Office Action states that Liang discloses monitoring plurality of applications, programs) (Liang, col. 5, lines 11-30).

In the cited passage (Liang, col. 5, lines 11-30), Liang states that a plurality of predefined parameters of designated applications/programs/parts executing/running are monitored through software that is downloaded to the registered server, and that the software collects the status information for a monitoring server remotely located with respect to the registered server. Liang further states that the status may include parameters of applications/programs being executed and components functioning in a registered server, that the parameters may include memory leakage status, various standards compliance, temperature of a power supply, the rotating speed of the hard disk, cooling fan conditions in the registered server, and additional parameters or status for determination of the health condition of the registered server. In other words, Liang downloads software to a registered server and collects information to determine the health of the registered server.

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In rebuttal to the above, as stated with respect to hardware parameters that Liang collects, the parameters that Liang is collecting with respect to applications, for example memory leakage, are related to failure prediction, not additional resource allocation. Liang does not disclose or suggest Applicant's claimed utilization by available applications of hardware resources because Liang is monitoring parameters that would indicate hardware failure, not parameters that would reflect hardware usage. Therefore, Liang does not make obvious Applicant's claims 7, 14, 21, and 28, because Liang does not analyze applications with respect to their utilization of hardware resources. Liang cannot make obvious Applicant's claims 7, 14, 21, and 28, and the rejection of those claims under 35 U.S.C. § 103 should be withdrawn.

On pages 6-7 of the Office Action, in paragraphs 17, 22, and 23 with respect to dependent claims 11, 12, 25, 26, 31, and 32,

(1) The Office Action states that Liang does not disclose adding the hardware resources to said computer from a remote location and removing the hardware resources from said computer.

(2) The Office Action states that Sampath discloses adding the hardware resources to said computer from a remote location and removing the hardware resources from said computer (The Office Action states that Sampath discloses control command for re-configuration hardware (Sampath, col. 9, lines 36-54).

In the cited passage (Sampath, col. 9, lines 36-54), Sampath states that control commands could include calibration procedures, device set-up procedures, control re-configuration commands, hardware re-configuration commands, and the like. Sampath further states that the monitored electronic system and diagnostic server and the various service and/or parts/consumable suppliers could be each remotely located on a distributed network, or that all, or portions thereof, could be incorporated into one or more of the other systems of the system. In other words, in the system of Sampath, interrogation commands and control signals are initiated by service engineers or autonomous repair agents.

In rebuttal to the above, Applicant, on the contrary, claims adding hardware resources from a remote location and removing hardware resources based on the prediction of the future level of availability of the monitored resource. Sampath's system focuses on failure

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prediction and diagnoses (Sampath, Abstract), but Sampath does not disclose or suggest Applicant's claimed adding or removing hardware resources based on a future level of availability because Sampath's predicting and managing a failure requires monitoring failure-type data (component temperature, for example) and accessing repair-type information (service providers, for example), whereas Applicant's claimed adding or removing hardware based on level of availability requires monitoring usage-type data (for example memory usage and disk usage). For this reason, and because Liang and Sampath cannot be combined, as stated previously, Liang and Sampath, either separately or in combination, cannot make obvious Applicant's claims 11, 12, 25, 26, 31, and 32, and the rejection of those claims under 35 U.S.C. § 103 should be withdrawn.

On page 7 of the Office Action, in paragraphs 18, 21, 22, and 23 with respect to dependent claims 13, 19, 27, and 33, the Office Action states that Liang discloses storing historical data on resource usage (Liang, FIGs. 4A-C and 6, col. 6, lines xx, col. 7, lines 20-36, col. 8, lines 12-20).

In Liang's FIGs. 4A-C and 6, Liang depicts raw data, averaged data, and data trends, the data including temperature, cooling fan speed, and hard disk revolution rate.

Applicant notes that the first cited passage, "Liang, col. 6, lines" is incomplete. Applicant will attempt to respond to the Office Action without benefit of a complete citation.

In the second cited passage (Liang, col. 7, lines 20-36), Liang states that, at the end of a day, data are automatically consolidated into a single representation, for example, temperature and surrounding temperature, that a series of historic data is collected, and that a possible breakdown of a component or a part in a server or the server itself is predicated based on the historic data.

In the third cited passage (col. 8, line 45-48), Liang states that the sampled values could be archived to update the historic data. In other words, Liang states that historic and sampled values are used to predicate a component breakdown, and that sampled values include temperature, cooling fan speed, and hard disk revolution rate, that sampled values are archived to update historic data.

In rebuttal to the above, Liang does not disclose or suggest Applicant's claimed historical data on resource usage because Liang's data – temperature, cooling fan speed, disk revolution rate – are not directly indicative of usage. For example, cooling fan speed varies according to the temperature of the device that it cools. That temperature is unrelated to the number of applications in use, which is a measure of resource usage, and although the disk revolves when it is being used, its revolution rate is not directly related to resource usage because the revolution rate is a characteristic of the type of disk. If Liang were performing Applicant's claimed step of storing historical (utilization) data on resource usage (utilization), Liang would collect the same data that Applicant collects, namely network disk space, number of processes, network bandwidth utilization, and number of users, for example. Because Liang does not disclose or suggest Applicant's claimed invention, Liang cannot make obvious Applicant's claims 13, 19, 27, and 33, and the rejection under 35 U.S.C. § 103 should be withdrawn.

On page 8 of the Office Action, in paragraphs 24-26 with respect to dependent claims 6 and 20,

(1) The Office Action states that Liang and Sampath do not specifically disclose the signal is in graphical form for each of the monitored hardware resources.

(2) The Office Action states that Johnson discloses the signal is in graphical form for each of the monitored hardware resources (i.e. GUI) (Johnson, paras. 96 and 106).

In the first cited paragraph (para. 96), Johnson states that WEB screen panels may be generated internal to content router 200 such that content router 200 may provide its own systems management graphical user interface (GUI), that WEB based protocols preferably provide the capability to modify content router 200 remotely, and that examples of such content router 200 modification include configuration and remote software/firmware updates.

In the second cited paragraph (para. 106), Johnson states that, with respect to monitoring, content router monitors hardware and software subsystems, that the GUI layer of the content router interprets the monitored data into meaningful status information, and that the interpreted data are made available to a user for interpretation. Elsewhere (para. 105) Johnson states that the content router performs various fault management functions. In other

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words, the content router monitors subsystems, interprets the monitored fault management data, and provides that information to a user of the GUI.

In rebuttal to the above, Applicant, on the contrary, claims providing a signal in graphical form when the prediction of a future level of availability of a monitored hardware resource fails to meet an availability threshold. Nowhere does Johnson disclose or suggest Applicant's graphical signal with respect to hardware resource availability because Johnson's content router is performing fault management monitoring. As previously discussed, availability monitoring involves monitoring certain parameters, whereas fault management monitoring involves another mutually exclusive set of parameters. Therefore, Johnson does not make obvious Applicant's claims 6 and 20 and the rejection of claims 6 and 20 under 35 U.S.C. § 103 should be withdrawn.

In further rebuttal, the content router of Johnson, which appears to be considered, in some places, by the Office Action to be equivalent in function to the registered server of Liang, is providing monitoring of the health of hardware and software subsystems. The registered server of Liang is expected to collect information and pass it to the monitoring server for analysis, and would not operate as intended if the registered server were itself interpreting the collected information and making it available to the user because the user would be receiving possibly conflicting information from the registered server and the monitoring server. For this reason Liang and Johnson are not combinable for the purposes of 35 U.S.C. § 103.

In still further rebuttal, the capabilities of the content router of Johnson stated in the cited passages -- specifically a system management graphical user interface to modify the content of the router remotely, and the ability of the content router to monitor the health of key hardware and software resources using counters and statistics that are made available to the user – are not disclosed in the priority document of Johnson, US '211. Thus, Johnson fails as a reference because Johnson was filed on March 1, 2001, which is after Applicant's filing date of December 11, 2000.

V. CONCLUSION

Applicant files herein a Request for Continued Examination under 37 C.F.R. § 114 along with this amendment. Since Liang, Sampath, and Johnson, separately or in combination, do not either teach or suggest each and every element of Applicant's amended independent claims 1, 9, 15, 23, and 29, and claims 2-4, 6-14, 16, 18-22, 24-28, and 30-33, which depend therefrom, Applicant's amended independent claims 1, 9, 15, 23, and 29, and claims 2-4, 6-14, 16, 18-22, 24-28, and 30-33, which depend therefrom, are not made obvious by the combination of Liang, Sampath, and Johnson. Therefore, a rejection under 35 U.S.C. § 103(a) is no longer applicable.

Applicant respectfully asserts that amended independent claims 1, 9, 15, 23, and 29, and claims 2-4, 6-14, 16, 18-22, 24-28, and 30-33, which depend therefrom, are in condition for allowance. Applicant respectfully requests the withdrawal of the rejection under 35 U.S.C. § 103(a) with regards to amended independent claims 1, 9, 15, 23, and 29, and claims 2-4, 6-14, 16, 18-22, 24-28, and 30-33, which depend therefrom, for the reasons set forth above.
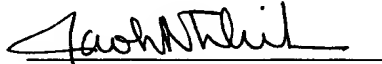
Applicant further respectfully points out that since Johnson has failed as a reference, there is no valid rejection stated against dependent claims 6 and 20, and they are therefore allowable.

Applicant herein authorizes the Commissioner for Patents to charge any fees or credit overpayment to Deposit Account No. 50-1078, in particular the fee of $1120.00 to cover the RCE fee and a two-month extension of time (minus the fee for the one-month extension of time which has already been paid).

The following information is presented in the event that a call may be deemed desirable by the Examiner: Jacob N. Erlich (617) 854-4000

Respectfully submitted,
Thomas C. Harrop, Applicant

Date: March 20, 2006

By: _____
Jacob N. Erlich
Reg. No. 24,338
Attorney for Applicant